

## Abstract

- 5 Recombinant CELO virus or CELO virus DNA with a  
deletion or disruption of the Gam1 gene, optionally  
combined with deletions at the right or left end of the  
viral genome that allow insertion of large pieces of  
foreign DNA. The virus is useful as a vaccine for  
10 animals, in particular birds, and for gene therapy and  
vaccine applications in humans. The virus can also be  
used for recombinant protein production.